

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addease COMMISSIONER FOR PATENTS PO Box 1430 Alexandria, Virginia 22313-1450 www.webjo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/774,629	02/10/2004	Naoaki Yamanaka	040803-0307870	9790	
991 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500			EXAM	EXAMINER	
			IOO, JOSHUA		
MCLEAN, VA	A 22102		ART UNIT	PAPER NUMBER	
			2454	•	
			MAIL DATE	DELIVERY MODE	
			05/28/2010	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/774,629 Filing Date: February 10, 2004 Appellant(s): YAMANAKA ET AL.

> Eric B. Compton For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 11, 2008 appealing from the Office action mailed March 13, 2008.

#### (1) Real Party in Interest

A statement identifying by name the real party in interested is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-11, 14-15, 21, and 25 are rejected and pending in the application.

### (4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

### (5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds

Art Unit: 2454

of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

## NEW GROUND(S) OF REJECTION

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11, 14-15, 21, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim I recites the following means plus limitation: "means for copying information held in a packet sent from an information providing terminal and for generating a plurality of packets with the same information".

This limitation invokes 35 USC § 112, sixth paragraph because it meets the 3-prong analysis set forth in MPEP 2181 as the claim recites the phrase "means for" (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see Altiris Inc. v. Semantec Corp., 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112." In re Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented

Art Unit: 2454

means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer. *WMS Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portion of the specification appears to describe the corresponding structure for performing the claimed function:

"copying nodes (2) wherein the copying nodes are means for copying information held in a packet sent from information providing terminal 7 and for generating a plurality of packets with this same information" [page 20, lines 24-29, page 23, lines 2-8. Corresponding US Publication 2004/0205221, paragraphs 0112, 0123]

The specification does not disclose sufficient corresponding structure, material or acts for performing the claimed function. The specification discloses that node or terminal (2) performs claimed function copying and generating [page 20, lines 24-29, page 23, lines 2-8]. However, the specification does not set forth any software instructions, code or algorithm(s) executed by the nodes or terminals in order to realize the claimed function. The specification, although points to the "copying nodes (2)" as being the means for copying, the specification *merely states* repeatedly "copying nodes 2 are means for copying information held in a packet sent from an information providing terminal 7, and for generating a plurality of packets with this same information" [Page 20, lines 24-29]. For a computer-implemented means-plus-function claim limitation that invokes 35 U.S.C. 112, 6<sup>th</sup> paragraph, the corresponding structure must include the instructions, algorithm, or code, as well as the (node in this case) e.g. CPU or processor of the nodes/terminals executing these instructions. As such, Appellants have failed to adequately describe sufficient structure for performing the function(s) claimed.

Art Unit: 2454

## (7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

# (8) Evidence Relied Upon

6,545,982	Murthy et al.	4-2003
EP 0915598	Bushmitch	5-1999

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11, 14-15, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murthy, US Patent No. 6,545,982 (Murthy hereinafter), in view of Bushmitch EP 0915598 (Bushmitch hereinafter).

As per claim 1. Murthy discloses the invention as claimed including a network comprising;

Art Unit: 2454

means for copying information held in a packet sent from an information providing terminal and for generating a plurality of packets with the same information, (Col. 2, lines 49-56; col. 13, lines 30-34; col. 18, lines 10-22, and lines 60-67)

means for distributing the packets thereby generated to a plurality of user terminals; (col. 9, lines 1-54; broadcast, multicast table, col. 15) wherein:

means within said information providing terminal for adding information to the packet; means within said information providing terminal for adding to the packet a content identifier or both the content identifier and a category identifier; wherein the information provided by said information providing terminal is assigned a unique content identifier or both the content identifier and the category identifier for identifying the category to which the content of the information in the packet belongs; (protocol ID, address, length field, CRC, various headers, col. 7-9, especially col. 8, lines 16-58, col. 9, lines 28-39; packet descriptor or mask, cols. 11-12, and col. 17, especially col. 11, lines 5-60, and col. 12, lines 50-59) and

wherein the distributing means comprises means for deciding, in accordance with the content identifier, or in accordance with one or both of the content identifier and category identifier, whether or not to distribute that packet to a given user terminal. (col. 8, lines 15-67; cols. 11-12)

Murthy teaches all the limitations of claim 1 except for specifically a push network.

Bushmitch teaches a push network and admission control of devices registering with service providers. (Paragraphs 0006-0007 describe the use of a push architecture and admission control of devices)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Murthy and Bushmitch because both networks send multicast traffic to devices, and Bushmitch offers details of end devices registering (using call admission control CAC) with service providers. It would have been obvious for the end users to register with service providers in order to set up a call or to

Art Unit: 2454

set up a path such as a VPI/VCI. Murthy discloses packet based protocols (col. 4, lines 20-30) and ATM which uses CAC is one such packet based protocol.

As per claim 2, Murthy discloses a push network as claimed in Claim 1, wherein means is provided for adding a content identifier to a packet, and the distributing means comprises means for deciding, in accordance with the content identifier, whether or not to distribute that packet to a given user terminal. (As cited in claim 1, Murthy discloses means for adding a content identifier to a packet, and means for deciding whether to distribute the packet in (protocol ID, address, length field, CRC, various headers, col. 7-9, especially col. 8, lines 16-58; packet descriptor or mask, cols. 11-12, and col. 17, especially col. 111, lines 5-60, and col. 12, lines 50-59) and (col. 8, lines 15-67; cols. 11-12))

As per claim 3, Murthy discloses a push network as claimed in Claim 2, wherein the decision means includes: a table, provided in correspondence with a destination, in which content identifier related information has been registered; and means for passing a packet if the content identifier added to that packet matches the content identifier related information registered in the table. (Col. 9, lines 31-52 describe how a router/bridge will modify the fields of a packet and then apply rules to determine how and where to transmit a packet in addition to tables (e.g., B/M table col. 15), registering a content ID (using the tables, col. 14))

As per claim 4, Murthy discloses a push network as claimed in Claim 3, wherein means is provided for registering content identifier related information in the table in accordance with notification from a user. (Col. 8 lines 65-67 where Murthy states that templates and rules are defined through the use of a the supervisory access terminal, which would be used by a user. As well as table entries with

Art Unit: 2454

notification from user and deleting means (e.g., XMASKs, col. 13, lines 6-46; custom filtering rules, col. 14, table entries, col. 16, lines 16-45))

As per claim 5, Murthy discloses a push network as claimed in Claim 3, wherein means is provided for deleting from the table content identifier related information that has been registered in the table, once a series of packets to which that content identifier has been added have passed. (XMASK (described in Col. 11-13 of Murthy) are related to a category and/or a content of a packet as they describe where a packet is to be sent, and after a packet is sent, these XMASKs would be deleted and new ones created for the new packets received. Col. 16 lines 24-37).

As per claim 6, Murthy discloses a push network as claimed in Claim 5, wherein the deleting means comprises means for deleting content identifier related information from the table after a prescribed time interval has elapsed after the series of packets have passed. (see Col. 16 lines 24-37, which describes the deletion of entries from a table).

As per claim 7, Murthy discloses a push network as claimed in Claim 3, wherein means is provided for deleting from the table, at a predetermined time, content identifier related information registered in the table. (see Col. 16 lines 24-37, which describes the deletion of entries from the table).

As per claim 8, Murthy discloses a push network as claimed in Claim 3, wherein the decision means comprises means for receiving a packet requesting deletion of content identifier related information, and for deleting the corresponding content identifier related information from the table. (see Col. 16 lines 24-37, which describes receiving a request from a remote system causing deletion of entries from a table).

Art Unit: 2454

As per claim 9, Murthy discloses a push network as claimed in Claim 8, wherein the user terminal comprises means for transmitting a packet requesting deletion of content identifier related information. (see Col. 16 lines 24-37, which describes receiving a request from a remote system causing deletion of entries from a table, and as the bridge/router is able to forward packets, the packet can then be forwarded on to the next router to ensure cache coherency).

As per claim 10, Murthy discloses a push network as claimed in Claim 8, wherein the information providing terminal comprises means for transmitting a packet requesting deletion of content identifier related information. (see Col. 16 lines 24-37, which describes receiving a request from a remote system causing deletion of entries from a table, and as the bridge/router is able to forward packets, the packet can then be forwarded on to the next router to ensure cache coherency).

As per claim 11, Murthy discloses a push network as claimed in Claim 3, wherein the decision means comprises means which, if no packet having the same content identifier as that of passed packets arrives within a fixed time interval after the final packet has passed, deletes from the table the information relating to that content identifier. (see Col. 16 lines 24-37, which describes receiving a request from a remote system causing deletion of entries from a table,).

As per claim 14, Murthy discloses a push network as claimed in Claim 4, wherein the registering means comprises means for receiving a request packet in which has been written a content identifier relating to content desired by a user, and means for registering content identifier related information in the aforementioned table in accordance with the content identifier written in the request packet received by

Art Unit: 2454

this receiving means. (Col. 9, lines 31-52 describe how a router/bridge will modify the fields of a packet and then apply rules to determine how and where to transmit a packet.).

As per claim 15, Murthy discloses a push network as claimed in Claim 4, wherein one registering means is provided for a plurality of decision means, and this registering means comprises: means for storing, in correspondence with content, information indicative of the information providing terminal constituting the source of packets with that content; means for searching for a route from that information providing terminal to a given user terminal in accordance with the stored contents of this storage means; and means which, in accordance with the result of the search conducted by this searching means, registers content identifier related information notified by a user, in the tables of the decision means along the route in question. (Col. 9, lines 31-52 describe how a router/bridge will modify the fields of a packet and then apply rules to determine how and where to transmit a packet.).

As per claim 21, Murthy discloses a push network as claimed in Claim 1, wherein means is provided for temporarily storing a packet which the decision means has decided to distribute. (Col. 10, lines 53-55 describe packet buffers).

As per claim 25, Murthy discloses a push network as claimed in Claim 1, wherein means is provided for adding to a packet one or both of a content identifier and a category identifier; and the distributing means comprises means for deciding, in accordance with this content identifier and/or category identifier, whether or not to distribute that packet to a given user terminal. (protocol ID, address, length field, CRC, various headers, col. 7-9, especially col. 8, lines 16-58; packet descriptor or mask, cols. 11-12, and cl. 17, especially col. 111. lines 5-60, and col. 12, lines 50-59)

#### (10) Response to Argument

Regarding claims 1-2, 6-11, 14-15, and 21, Appellant argues:

 a) Murthy fails to disclose or teach "means within said information providing terminal for adding information to the packet", (Brief, pp 6-7)

b) Murthy fails to disclose or teach "means within said information providing terminal for adding to the packet a content identifier or both the content identifier and a category identifier." (Brief pp 8-9)

In response, Examiner respectfully disagrees that Murthy fails to disclose or teach the features.

Firstly, the Examiner points out that the bridge shown in Fig. 1 is the information providing apparatus. The bridge of Murthy contains a means for adding information to a packet as shown in Col. 9 lines 24-45, which disclose the adding of various information to a packet, such as destination address, and the adding of information to sub-fields of the packet.

Secondly, the Examiner notes that the Appellant is importing limitations from the specification into the claims. Claim 1 recites: "a unique content identifier or both the content identifier and the category identifier for identifying the category to which the content of the information in the packet belongs."

There is nothing in this limitation that limits the definition of a content identifier to only describe those things which do not relate to the way in which the data in the packet is to be transmitted. Therefore, the Examiner is interpreting 'content identifier' broadly enough to include information identifying where the content is to be sent, but specifically is equating it to the information found in Col. 9 lines 42-44 in Murthy, such as priority. Further, this limitation referred to by Appellant is an intended use limitation, not a functional limitation, so should not be given patentable weight.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the content identifier must be specifically related to the topic or category of the content in the packet and not related to a transmission method of the content) are not recited in the rejected claim(s). Although the claims are interpreted in light

Art Unit: 2454

meets the claim.

of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPO2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the content identifier is for identifying a category of a content of a packet, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it

For these reasons, the rejection of claims 1-2, 6-11, 14-15, and 21 under 35 U.S.C. 103(a) should be maintained

Regarding claim 3, Appellant argues:

Murthy does not disclose "a table, provided in correspondence with a destination, in which content identifier related information has been registered; and means for passing a packet if the content identifier added to that packet matches the content identifier related information registered in the table" (brief, pp 10-11)

In response, Examiner respectfully disagrees with Appellant's arguments. The Examiner points to Col. 9, lines 31-52 describe how a router/bridge will modify the fields of a packet and then apply rules to determine how and where to transmit a packet. Appellant's appears to be arguing again the same as the argument presented in Claim 1, that Murthy does not disclose a "content identifier", and the Examiner's arguments about the interpretation of a content identifier apply equally to this claim.

For these reasons, the rejection of claim 3 under 35 U.S.C. 103(a) should be maintained.

Regarding claim 4, Appellant argues:

Art Unit: 2454

Murthy does not disclose or teach "registering a content ID in accordance with notification from a user" because the Examiner has mischaracterized Murthy, (Brief, pg 12)

In response, Examiner respectfully disagrees, further noting in Col. 8 lines 65-67 where Murthy states that templates and rules are defined through the use of a the supervisory access terminal, which would be used by a user. Appellant appears to be arguing again the same as the argument presented in Claim 1, that Murthy does not disclose a "content identifier", and the Examiner's arguments about the interpretation of a content identifier apply equally to this claim.

For these reasons, the rejection of claim 4 under 35 U.S.C. 103(a) should be maintained.

Regarding claim 5, Appellant argues:

Murthy does not disclose or teach "means provided for deleting from the table content identifier related information that has been registered in the table, once a series of packets to which that content identifier has been added have passed". (pg 13)

In response, Examiner respectfully disagrees, noting that an XMASK (described in Col. 11-13 of Murthy) are related to a category and/or a content of a packet as they describe where a packet is to be sent, and after a packet is sent, these XMASKs would be deleted and new ones created for the new packets received, see also Col. 16 lines 24-37. Appellant appears to be arguing again the same as the argument presented in Claim 1, that Murthy does not disclose a "content identifier", and the Examiner's arguments about the interpretation of a content identifier apply equally to this claim.

For these reasons, the rejection of claim 5 under 35 U.S.C. 103(a) should be maintained.

Regarding claim 25, Appellant argues:

Murthy does not disclose adding either one or both of a content identifier and category identifier to a packet. (pg 14)

In response, Examiner points out that the claim only requires adding one of a content identifier and a category identifier, and as argued in the previous claims, Murthy does add at least a content identifier to a packet. However, Murthy also adds a category identifier, one possibility of which in

identifier to a packet. However, Murthy also adds a category identifier, one possibility of which in addition to the items listed in Col. 9 lines 40-45, would be the previously cited XMASK which describes the ports to which the content of a packet would be forwarded, categorizing the packets as shown in Table 1 of Murthy, located in Col. 11.

For these reasons, the rejection of claim 25 under 35 U.S.C. 103(a) should be maintained.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

#### Conclusion

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above.

Accordingly, appellant must within TWO MONTHS from the date of this answer exercise one of the following two options to avoid sua sponte dismissal of the appeal as to the claims subject to the new ground of rejection:

(1) Reopen prosecution. Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) Maintain appeal. Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Joshua Joo /JJ/

/NATHAN FLYNN/

Supervisory Patent Examiner, Art Unit 2454

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

/Jack Harvey/

Director, Technology Center 2400

Conferees:

/NATHAN FLYNN/

Supervisory Patent Examiner, Art Unit 2454

Art Unit: 2454

/Joseph E. Avellion/

Supervisory Patent Examiner